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APPLICATION NO.	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/658,173	09/08/2003		Kai-Te Chen	JCLA10431	3339	
23900	7590	12/16/2004		EXAM	EXAMINER	
J C PATEN		VY, HU	VY, HUNG T			
4 VENTURE, SUITE 250 IRVINE, CA 92618				ART UNIT	PAPER NUMBER	
,,				2821		
				DATE MAILED: 12/16/200-	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	F10-
1	10/658,173	CHEN ET AL.	
Office Action Summary	Examiner	Art Unit	
·	Hung T Vy	2821	·
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet w	ith the correspondence addres	ss
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory properties to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a on. a reply within the statutory minimum of the period will apply and will expire SIX (6) MO statute, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this commu	unication.
Status			
1)☐ Responsive to communication(s) filed on 2a)☐ This action is FINAL . 2b)☒ 3)☐ Since this application is in condition for all closed in accordance with the practice uncondition.	This action is non-final.	•	erits is
Disposition of Claims			
4) ☐ Claim(s) 1-16 is/are pending in the application 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-16 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction as	hdrawn from consideration.		
Application Papers			
9) The specification is objected to by the Exa 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the control of the c	accepted or b) objected to the drawing(s) be held in abeya prrection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1	
Priority under 35 U.S.C. § 119		•	
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	ments have been received. ments have been received in a priority documents have been ureau (PCT Rule 17.2(a)).	Application No n received in this National Sta	ge
Attachment(s) 1) Notice of References Cited (PTO-892)	4) ☐ Intensiow	Summary (PTO-413)	
 Notice of References Cited (PTO-692) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date 	Paper No	(s)/Mail Date Informal Patent Application (PTO-152	2)

Art Unit: 2821

DETAILED ACTION

Page 2

Specification

1. The specification has been checked to the extent necessary to determine the presence of possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

(1

Art Unit: 2821

3. Claim 1, 4-5, 8 -10, 13 and 16 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Jo et al., U.S. pub. No. 2003/0117325.

Regarding claims 1 and 5, Jo et al. disclose an antenna on a printed circuit board (PCB) with a compensating capacitor, the antenna comprising: a radiator (24,26 or 104, 102) disposed over a first surface of the PCB (See paragraph 0034), wherein the radiator (10) includes a short circuit stub section (15), a signal feeding section (14), and a tuning section coupled together at a joint (see fig, 2,313,14, and 15), wherein the tuning section includes a bending portion (see fig, 2,313,14, and 15); a signal feeding line (18), disposed on the first surface of the PCB (20) and electrically coupled to the radiator at the signal feeding section of the radiator (10) (see fig. 1 and paragraph 0034); and a ground layer (12), disposed on a second surface of the PCB (20), one terminal of the short circuit stub section (15) being electrically coupled to the ground layer (15)(See fig. 1-3), wherein the bending portion (26,24) of the tuning section is overlapping with the ground layer (12) to form the compensating capacitor (see paragraph 0048, 0070).

Claims 4 and 8, Jo et al. disclose the bending portion of the tuning section extends crossing over an edge of the ground layer (See fig. 2,313,14, and 15).

Claims 9-10, 13 and 16, the methods for forming an antenna on a printed circuit board (PCB), since Jo et al. disclose the product, it is inherent a product by process for performing the method is recited in the claims.

Art Unit: 2821

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth insection 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-3, 6-7, 11-12, and 14-15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Jo et al., U.S. Pub. No. 2003/0117325 in view of Ngounou Kouam et al., U.S. Patent No. 6,606,062.

Claims 2-3, 6-7, 11-12 and 14-15, Jo et al. disclose all limitations of claim except for the ground layer includes a protruding portion from an edge. However, Ngounou Kouam et al. disclose the ground layer includes a protruding portion from an edge (4), wherein the protruding portion is at least overlapping with antenna (34)(See fig. 1). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Jo et al. to have overlapping with the bending portion of the tuning section by Ngounou Kouam et al. The motivation of doing so would have been to provide the protruding portion in order to reduce the overall size of the antenna (See column 7, line 23-27).

Art Unit: 2821

Conclusion

5. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hung T. Vy Art Unit 2828 December 10, 2004

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Page 6

Supervisory Patent Examiner Technology Center 2800